

## CLAIMS

What is claimed is:

1. An optical spectral monitoring system, comprising:  
5 a broadband superluminescent light emitting diode (SLED) source; and  
a tunable filter that filters an optical signal generated by the SLED source.
2. An optical spectral monitoring system as claimed in claim 1, further  
comprising a package in which the SLED source and the tunable filter are installed.
3. An optical spectral monitoring system as claimed in claim 1, further  
10 comprising an optical bench on which the SLED source and the tunable filter are  
installed.
4. An optical spectral monitoring system as claimed in claim 1, further  
comprising an isolator between the SLED source and the tunable filter.
5. An optical spectral monitoring system as claimed in claim 1, wherein a  
15 finesse of the tunable filter is greater than 3000.
6. An optical spectral monitoring system as claimed in claim 1, wherein the  
tunable filter is a Fabry-Perot filter.
7. An optical spectral monitoring system as claimed in claim 1, wherein the  
tunable filter is a MEMS Fabry-Perot filter.
8. An optical spectral monitoring system as claimed in claim 1, wherein the  
20 optical signal includes the 1250-1350 nanometer wavelength range.
9. An optical spectral monitoring system as claimed in claim 1, further  
comprising an optical bench on which the SLED source and tunable filter are installed,

the tunable filter being installed orthogonally in the bench to filter the optical signal, which is propagating parallel to the bench.

10. An optical spectral monitoring system as claimed in claim 1, further comprising a detector that detects the filtered optical signal from the tunable filter.